UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,718	05/17/2001	James M. Gust	GRD0122.CIP	4110

7590 09/11/2002

Todd T. Taylor
TAYLOR & AUST, P.C.
142 S. Main St.
P.O. Box 560
Avilla, IN 46710

EXAMINER
PATEL, DHIRUBHAI R

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/859,718	Applicant(s) GUST ET AL.	
	Examiner DHIRU R PATEL	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Part III DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in claims 1, 10 and 14, "solely " is not supported by the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-3, 7-10, and 13 as best understood, are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Beckwith et al (5,780,771). Guginsky discloses : an electrical assembly 10, comprising;

Regarding claim 1, at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27, and Webster's II New Riverside University Dictionary page 296 define "conduit" as a tube), said tubing loosely carrying said at least one electrical conductor 29(see fig 1); and an electrical component 12 (fitting, see fig 1, column 3 lines 35-40) associated with said at least one electrical conductor 29 (see fig 1), said electrical component hermetically sealing said tubing end (see fig 1, column 2 lines 10-20, lines 45-60, and column 3 lines 35-45), but fails to disclose said electrical component solely hermetically sealing said tubing end. Beckwith teach the use of a solely hermetically sealant 54 for conductor in order to protect housing from environmental contamination entering into the housing 12 (see fig 3, column 4 lines 30-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flexible electrical tubing 11 of the assembly of Guginsky with a solely hermetically sealant as taught by Beckwith in order to protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

Regarding claim 2 , the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing including an inner surface (see fig 1 of Guginsky), said electrical component hermetically sealing with said inner surface (see column

2 lines 45-60 of Guginsky, please note that the modified assembly of Guginsky meet the claimed limitation).

Regarding claim 3, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said electrical component comprising an electrical connector (see column 4 lines 33-36 of Guginsky) having at least one electrical terminal (inherent properties of a connector), and capable of functioning as claimed by inventor.

Regarding claims 7 and 13, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing including a non- smooth inner surface (see fig 1 of Guginsky), said electrical component (for claim 7) and said electrical connector (for claim 13) having an outer periphery which is in continuous, intimate physical contact with said inner surface (see fig 2 of Guginsky).

Regarding claim 8, the modified assembly of Guginsky disclosed all the feature of the claimed invention. With respect to said electrical component formed by the process of insert molding with said tubing. The presence of process limitations in product claims, which product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. In re Stephens 145 USPQ 656 (CCPA 1965).

Regarding claim 9, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, including said tubing having a non- smooth outer surface with one of a convoluted and spiral shape (see fig 1 of Guginsky).

Regarding claim 10, Guginsky discloses : an electrical assembly 10, comprising;

at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27 and Webster's II New Riverside University Dictionary page 296 define "conduit" as a tube), said tubing loosely carrying said at least one electrical conductor 29 (see fig 1); and an electrical connector 12 (see column 4 lines 33-36) having at least one electrical terminal (inherent properties of a connector), said electrical component hermetically sealing said tubing end (see fig 1, see fig 1, column 2 lines 10-20, lines 45-60, and column 3 lines 35-45), but fails to disclose solely hermetically sealing said tubing end. Beckwith teach the use of a solely hermetically sealant 54 for conductor in order to protect housing from environmental contamination entering into the housing 12 (see fig 3, column 4 lines 30-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flexible electrical tubing 11 of the assembly of Guginsky with a solely hermetically sealant as taught by Beckwith in order to protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

3. Claims 4- 6 as best understood, are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Beckwith et al (5,780,771) as applied to claims 1 above, and further in view of Shimirak et al (4,701,574).

Regarding claim 4, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose a plug and said at least one electrical conductor sealed with said plug. Shimirak et al teach the use of a plug 12 (see fig 2) in order

to seal a cable (see column 3 lines 25-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the said electrical component of the modified assembly of Guginsky with a plug as taught by Shimirak et al in order to seal the conductor 29.

Regarding claims 5- 6, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection engaged with said inner surface for claim 5, and a plurality of annular projections for claim 6. Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the said electrical component of the modified assembly of Guginsky with at least one annular projection (for claim 5) and a plurality of annular projections (for claim 6) as taught by Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

4. Claims 11-12 as best understood, are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Beckwith et al (5,780,771) as applied to claims 10 above, and further in view of Shimirak et al (4,701,574).

Regarding claims 11-12, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection engaged with said inner surface for claim11 and a plurality of annular projections for

claims12. Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide said electrical connector of the modified assembly of Guginsky with at least one annular projection (for claim 11) and a plurality of annular projections (for claim 12) as taught by Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

5. Claims 14-17 as best understood, are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guginsky (5,283,393) in view of Shimirak et al (4,701,574) and Beckwith et al (5,780,771).

Regarding claim 14, Guginsky discloses at least one electrical conductor 29 (see fig 1), a flexible electrical tubing 11 having an end (conduit, see fig 1, column 3 lines 25-27), said tubing loosely carrying said at least one electrical conductor (see fig 1). Guginsky fail to disclose a plug solely hermetically sealing said tubing . Shimirak et al teach the use of a plug 12 hermetically sealing a tubing 18 (see fig 2) in order to seal a cable (see column 3 lines 25-34), and Beckwith teach the use of a solely hermetically sealant 54 for conductor in order to protect housing from environmental contamination entering into the housing 12 (see fig 3, column 4 lines 30-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide said tubing end of the assembly of

Guginsky with a plug with solely hermetically sealing as taught by Shimirak et al and Beckwith respectively in order to seal the conductor 29 and to protect the flexible electrical tubing 11 from environmental contamination entering into the flexible electrical tubing 11.

Regarding claims 15-16, the modified assembly of Guginsky disclose all the features of the claimed invention as shown above, but fails to disclose at least one annular projection engaged with said inner surface for claim 15 and a plurality of annular projections for claim 16. Shimirak et al teach the use of a plurality of annular projections 88 (see fig 3) in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface 88 of the end seals (see column 4 lines 52-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the plug of the modified assembly of Guginsky with at least one annular projection (for claim 15) and a plurality of annular projections (for claim 16) as taught by Shimirak et al in order to prevent positively water or moisture from propagating axially down the end seal along an outer surface of the end seals.

Regarding claims 17, said tubing including a non- smooth inner surface (see fig 1 of Guginsky), said electrical component having an outer periphery which is in continuous, intimate physical contact with said inner surface (see fig 2 of Guginsky).

Response to Arguments

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Contact information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhiru Patel whose telephone number is (703) 308 -3748.The examiner can normally be reached on Mondays- Thursdays from 6:30 am to 4:00 pm.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard be reached at 703-308-3682. The fax number for this Group is 703-305-3431.Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Dhiru Patel
Patent Examiner
Group Art Unit 2831
September 6, 2002

Dhiru R Patel